

### **REMARKS**

Claims 1, 17-23 and 27-28 have been amended, and claims 4 and 24-26 have been cancelled as indicated above.

Specifically, claim 1 has been amended to include all of the features and limitations of original claim 4 (now cancelled). Claims 17-22 have been amended to replace “processor-readable” and “processor-executable” with “computer-readable” and “computer-executable”, respectively, and to clarify that rendering is performed by way of a display device. Claim 23 has been amended to include all of the features and limitations of original claims 24-26 (now cancelled), respectively.

Claim 27 has been amended to recite dependence from claim 23, as amended. Claim 28 has been amended to change the word “fashion” to “version”, to clarify that rendering is performed by way of a display device, and to replace the word “if” with “in response to determining that”. No new matter has been introduced by way of the amendments to the claims.

In view of the following remarks, Applicant traverses the Office’s rejections and respectfully requests that the application be forwarded on to issuance.

### **Telephone Communications**

The Applicant acknowledges two respective telephonic interviews conducted between the Examiner and Applicant’s representative on December 18, 2006. During those conversations, the Examiner and the representative discussed the status of the case and some proposed claim

amendments sent to the Examiner by facsimile transmission. Applicant believes that agreement was reached with the Examiner as to the following points:

a) The terms “render” and “rendering”, as they appear in respective claims, were understood by one of ordinary skill in the art at the time the Application was filed with the Office;

b) The Examiner has not found the respective subject matter of claims 4 or 10 to be taught or suggested by the art of record. It is noted that the subject matter of claim 4 (now cancelled) is fully recited by claim 1, as amended; and

c) Claims 4-6, 9-10, 19-22, 27 and 29-34 are rejected only under 35 U.S.C. § 101 within the Office action dated 11/09/2006, and are thus not otherwise rejected.

The Applicant appreciates the Examiner’s time in this regard as well as the cooperative direction of these communications. While Applicant does not believe that amendments to the claims are necessary, such amendments are made in the interest of clarity and cooperation so as to advance the Application toward allowance.

#### **§ 112 Rejections**

Claim 28 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Office asserts that the word “fashion” is unclear (page 2 of Office action).

Claim 28 has been amended as indicated above. In particular, the word “fashion” has been replaced with the word “version”. Support for this amendment to claim 28 can be found at least at page 22, lines 15-20 of the Specification as

originally filed. As such, Applicant asserts that the § 112 rejection of claim 28 has been fully addressed and respectfully requests that the rejection be withdrawn.

### **§ 101 Rejections**

Claims 1-34 stand rejected under 35 U.S.C. § 101 because, in the Office's opinion, "the claims are not directed towards the final result that is useful, tangible and concrete" (page 2 of Office action). However, Applicant respectfully disagrees with the Office and submits that claims 1-3, 5-23 and 27-34, as respectively amended, fully and completely comply with the § 101 standard for patentable subject matter. As such, Applicant asserts that the § 101 rejections are invalid and should be withdrawn. Furthermore, the Office is respectfully referred to the following discussion of § 101 rejections in the context of computer-related subject matter:

It is established law that an abstract idea, by itself, is considered to be unpatentable subject matter under § 101. See, e.g., AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1355 (1999)(pointing out that laws of nature, natural phenomena, and abstract ideas have generally been identified by the Supreme Court as unpatentable subject matter). However, if such an idea is taken out of the abstract and employed in a process that achieves a "new and useful end", the *process is* patentable subject matter, even if the idea by itself would not be. Id. at 1357. Thus, the relevant inquiry under § 101 becomes -- Is the idea being applied to achieve a useful end? Id. If so, then the § 101 threshold is satisfied. Id.

In AT&T, the invention was designed to operate in a telecommunications system with multiple long-distance service providers. The system contained local

exchange carriers ("LECs") and long-distance service (interexchange) carriers ("IXCs"). The LECs provided local telephone service and access to IXCs. Each customer had an LEC for local service and selected an IXC, such as AT&T or Excel, to be its primary long-distance service (interexchange) carrier or PIC. The system involved a three-step process when a caller made a direct-dialed (1+) long-distance telephone call: (1) after the call was transmitted over the LEC's network to a switch, and the LEC identified the caller's PIC, the LEC automatically routed the call to the facilities used by the caller's PIC; (2) the PIC's facilities carried the call to the LEC serving the call recipient; and (3) the call recipient's LEC delivered the call over its local network to the recipient's telephone.

When a caller made a direct-dialed long-distance telephone call, a switch (which could be a switch in the interexchange network) monitored and recorded data related to the call and generated an "automatic message account" ("AMA") message record. This contemporaneous message record contained fields of information such as the originating and terminating telephone numbers, and the length of time of the call. These message records were then transmitted from the switch to a message accumulation system for processing and billing.

Because the message records were stored in electronic format, they could be transmitted from one computer system to another and reformatted to ease processing of the information. Thus the carrier's AMA message subsequently was translated into the industry-standard "exchange message interface," forwarded to a rating system, and ultimately forwarded to a billing system in which the data resided until processed to generate, typically, "hard copy" bills which were mailed to subscribers.

The invention at issue in this case called for the addition of a data field into a standard message record to indicate whether a call involves a particular PIC (the "PIC indicator"). This PIC indicator could exist in several forms, such as a code which identified the call recipient's PIC, a flag which showed that the recipient's PIC was or was not a particular IXC, or a flag that identified the recipient's and the caller's PICs as the same IXC. The PIC indicator therefore enabled IXCs to provide differential billing for calls on the basis of the identified PIC.

One of the claims at issue – claim 1-- read as follows:

A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:

generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and

including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers.

In looking at the subject matter of this claim and finding the claim to pass muster under 35 U.S.C. § 101, the Court looked to the specification and commented as follows:

In this case, Excel argues, correctly, that the PIC indicator value is derived using a simple mathematical principle (p and q). But that is not determinative because AT&T does not claim the Boolean principle as such or attempt to forestall its use in any other application. It is clear from the written description of the '184 patent that AT&T is only claiming a process that uses the Boolean principle in order to determine the value of the PIC indicator. The PIC indicator represents information about the call recipient's PIC, a useful, non-abstract result that facilitates differential billing of long-distance calls made by an IXC's subscriber. Because the

claimed process applies the Boolean principle to produce a useful, concrete, tangible result without pre-empting other uses of the mathematical principle, on its face the claimed process comfortably falls within the scope of § 101.

Here, the Court looked at the specification and found that the environment and use of the PIC indicator – that of providing differential billing – provided a useful, concrete and tangible result. That result, however, was not specifically recited in the claim. Rather, it was described in the specification.

Likewise, in the present case, the specification provides a description of the utility and tangibility of the recited subject matter. Specific sections of the specification are excerpted below to further illustrate this point:

Implementations described and claimed herein solve the discussed problems, and other problems, by providing a document representation format to facilitate scalable web page structure. Web page content may be adapted to a display size by extracting information from the content in accordance with a layout optimization rule using a document representation structure in the web page definition.

An exemplary system includes a browser to browse a web page based on a web page definition having a slicing tree defining an arrangement of rectangular regions in the web page. The web page definition can include parametric data describing adaptability parameters associated with a rectangular region. A proxy module generates an intermediary adapted web page definition and a rendering module renders the adapted web page based on the adapted web page definition.

A method includes rendering the web page according to a slicing tree and block property data in an associated web page definition. The method may include determining a set of unsummarized blocks that maximize information fidelity. (Specification at page 2, line 21 to page 3, line 11).

Accordingly, in this excerpt as throughout the document, it is evident that the claimed subject matter has a specifically described useful, concrete and tangible result and application.

In view of the above discussion, Applicant respectfully submits that claims 1-3, 5-23 and 27-34 comply with the patentability requirements of § 101 and that the § 101 rejections should be withdrawn. The Applicant further asserts that claims 1-3, 5-23 and 27-34 are allowable.

### **§ 103 Rejections**

Claims 1-3, 7-8, 11-18 and 23-26 stand rejected under 35 U.S.C. § 103(a) as being anticipated by U.S. Patent Application Publication No. 2004/0133927 (“Sternberg”), in view of U.S. Patent Application Publication No. 2004/0177316 (“Layzell”).

### **The Claims**

**Claim 1** has been amended, and as amended recites a method comprising:

- receiving a web page definition at a computing device, the web page definition having a slicing tree describing an arrangement of a plurality of blocks in the web page;
- selecting a combination of the plurality of blocks to be adapted such that information fidelity is maximized according to the expression:

$$IF(P) = \sum_{B_i \in P} IMP_i \cdot IF_{B_i},$$

- where  $IMP_i$  is a value representing importance of block  $B_i$ ,  $IF_{B_i}$  is a value representing information fidelity of block  $B_i$ , and  $IF(P)$  is the total information fidelity of the web page; and

- rendering the web page on a display screen according to the slicing tree.

In making out the rejection of this claim, the Office argues that its subject matter is disclosed by Sternberg in combination with Layzell. Applicant respectfully disagrees and traverses the Office's rejection.

In particular, claim 1, as amended, includes all of the subject matter of original claim 4 (now cancelled), which the Examiner has stated is not found or suggested in the art of record (telephonic interviews of Dec-18-2006). Furthermore, and as noted above, Applicant reiterates that no § 102 or § 103 rejection has been cited heretofore against the subject matter of claim 4. Thus, Applicant asserts that the § 103 rejection against claim 1, as amended, is unsupportable for at least the foregoing reasons and should be withdrawn. In turn, Applicant asserts that claim 1 is allowable.

**Claims 2-3 and 5-11** are allowable at least as depending from an allowable base claim, as well as for their own respectively patentable features and recitations.

**Claim 12** recites a computer-readable medium having stored thereon computer-executable instruction for performing a method comprising:

- generating a web page definition having block property data defining a minimum perceptible size of a plurality of blocks in the web page.

In making out the rejection of this claim, the Office argues that its subject matter is disclosed by Sternberg in combination with Layzell. Applicant respectfully disagrees and traverses the Office's rejection. For the reasons set



forth below, the rejection over the combination of Sternberg and Layzell does not establish a prima facie case of obviousness.

Specifically, Sternberg fails to teach or suggest generating a web page definition having block property data defining a minimum perceptible size of a plurality of blocks in the web page as recited by this claim. Sternberg: 1) is not concerned with *web page definitions* in the first place; and 2) is completely lacking any teachings in regard to *a plurality of blocks in the web page*. Furthermore, Sternberg fails to teach or suggest any minimum perceptible size for a block, or any kind of property data defining such a characteristic.

Specifically, Sternberg is directed to generation of a “visual key” for each frame (or other quantum) of a media object to be considered in various searching and image matching and/or comparison operations (Abstract; *et seq.* of Sternberg). Sternberg further teaches that the content of web pages can be considered as sources to be searched for matching images and textual information (Para. 0587 of Sternberg). However, Sternberg provides no teachings whatsoever directed to the particular content of *web page definitions*, and certainly does not teach or suggest any such web page definition defining a minimum perceptible size of a plurality of blocks in the web page, as recited by the subject matter of claim 12.

In turn, Layzell fails to cure the deficiencies of Sternberg. More specifically, Layzell fails to teach or suggest generating a web page definition having block property data defining a minimum perceptible size of a plurality of blocks in the web page as recited by the subject matter of claim 12. Layzell discusses dimensions related to rectangular content items (Para. 0039 of Layzell).

However, Layzell does not teach or suggest property data defining minimum perceptible sizes for *any* entities.

Accordingly, for at least these reasons, the Office's *prima facie* case of obviousness against claim 12 fails. Applicant asserts that claim 12 is allowable for at least the foregoing reasons.

**Claims 13-16** are allowable at least as depending from an allowable base claim.

**Claim 17** has been amended, and as amended recites a computer-readable medium having computer-executable instructions for performing a method comprising:

- receiving a web page definition defining a plurality of blocks in a web page;
- determining a maximum information fidelity associated with a combination of summarized and unsummarized blocks in the web page; and
- rendering the web page on a display device with the combination of summarized and unsummarized blocks.

In making out the rejection of this claim, the Office argues that its subject matter is disclosed by Sternberg in combination with Layzell. Applicant respectfully disagrees and traverses the Office's rejection. For the reasons set forth below, the rejection over the combination of Sternberg and Layzell does not establish a *prima facie* case of obviousness. To help clarify this important point, attention is directed to the following disclosure of the Application:

In another implementation of block property data, an alternative version of a block is a summarized version of the block's contents, which is user selectable (e.g., hypertext). When the user selects the summarized

version, a new web page, which is the size of the target area, is rendered that includes the non-summarized, or original version of the block contents. Thus, the original version of the block is allocated the entire target area, rather than being squeezed into what may be a relatively small region of the target area.

Instead of deleting contents or showing an imperceptible adapted version, an alternative version enables users to see the whole in parts and can provide a much better solution to preserve contents, save display space, and aid user navigation. If necessary (i.e., for very large content blocks), a scroll bar may be added to the original block. (Page 20, lines 11-21 of Specification as originally filed. Emphasis added.).

Specifically, and in stark contrast to the immediately foregoing excerpt, Sternberg fails to teach or suggest determining a maximum information fidelity associated with a combination of summarized and unsummarized blocks in the web page as recited by this claim. Sternberg is lacking any teaching or suggestion related to summarized and unsummarized blocks in a web page as those terms are used in the present application and claim. Furthermore, Sternberg does not teach or suggest any sort of determination related to maximum information fidelity in regard to anything, and certainly not with respect to the subject matter of claim 17.

In particular regard to information fidelity, pertinent disclosures of the present Application are reproduced below for convenience:

Presentation of a web page involves rendering the web page in a viewable portion of a display screen based on the definition of the web page. Information blocks within the web page may be adapted and/or scaled during rendering as a function of block property data, target area size or dimensions, or other factors. In addition, the determination as to whether a block should be adapted (e.g., summarized), and the extent to which a block is adapted can be facilitated by analysis of a parameter, referred to as 'information fidelity' (IF).

Generally, IF represents a level of difference between a modified (e.g., adapted, scaled, etc.) version of a content object and the original

version of the content object. With respect to a web page, IF can represent a level of difference between adapted versions of one or more web page blocks and the original versions of the one or more web page blocks. IF can also represent the level of difference between an adapted version of an entire web page and the original web page.

Information fidelity (IF) can provide for quantitative evaluation of content representation. In an exemplary implementation, the value of IF ranges from zero (0) to one (1). In this implementation, an IF value of zero (0) indicates that all information has been lost due to adaptation and/or scaling of one or more web page blocks, whereas an IF value of one (1) indicates that all information has been preserved.

A total IF of a web page can be determined based on the IF of the individual blocks in a web page. The IF of a single block can be a function of various parameters, such as spatial region of display, content reduction of text, color depth or compression ratio of images, etc. (Page 21, line 15 to page 22, line 14 of Specification as originally filed. Emphasis added.).

In view of the foregoing, as well as other supporting disclosure within the Specification, Applicant asserts that: 1) information fidelity is clearly and specifically defined so as to be understood by one of ordinary skill in the computer science and related arts; and 2) information fidelity, in the present context, is completely lacking from the teachings of Sternberg.

Furthermore, Layzell fails to cure the deficiencies of Sternberg. More specifically, Layzell fails to teach or suggest determining a maximum information fidelity associated with a combination of summarized and unsummarized blocks in the web page as recited by this claim. Layzell provides no teaching or suggestion related to summarized and/or unsummarized blocks, nor does Layzell teach or suggest any sort of maximum information fidelity in regard to blocks in a web page, or anything else. To the contrary, Layzell is concerned with determining a page layout inclusive of some or all of a number of predetermined

objects, and does not consider or suggest combinations of summarized and unsummarized content (i.e., blocks) within a web page as recited in this claim (Para. 0002 of Layzell).

It is not possible to combine features selectively taken from Sternberg and Layzell so as to arrive at the subject matter recited by claim 17, as amended, as no possible combination of Sternberg and Layzell teaches or suggest all of the required subject matter. Accordingly, for at least these reasons, the Office's *prima facie* case of obviousness against claim 17 (as amended) fails.

**Claims 18-22** are allowable at least as depending from an allowable base claim. Applicant further notes that no § 102 or § 103 rejections have been issued against any of claims 19-22.

**Claim 23** has been amended, and as amended recites a system comprising:

- a browser operable to browse a web page based on a web page definition comprising a slicing tree defining an arrangement of a plurality of rectangular regions in the web page, the web page definition including parametric data associated with one of the plurality of rectangular regions, the parametric data describing adaptability parameters related to the associated rectangular region;
- a proxy module operable to generate an adapted web page definition based on the parametric data, wherein the proxy module is further operable to determine a set of the plurality of rectangular regions to be summarized such that information fidelity of the adapted web page is maximized; and
- a rendering module operable to render an adapted web page on a display screen based on the adapted web page definition.

In making out the rejection of this claim, the Office argues that its subject matter is disclosed by Sternberg in combination with Layzell. Applicant respectfully disagrees and traverses the Office's rejection. For the reasons set

forth below, the rejection over the combination of Sternberg and Layzell does not establish a prima facie case of obviousness.

The Applicant asserts that this claim is allowable at least for reasons analogous to those argued above in regard to claim 1, as amended. Specifically, Sternberg fails to teach or suggest any of (at least): 1) a web page definition comprising a slicing tree defining an arrangement of a plurality of rectangular regions in the web page; 2) a web page definition including parametric data associated with one of the plurality of rectangular regions, the parametric data describing adaptability parameters related to the associated rectangular region; and 3) a proxy module further operable to determine a set of the plurality of rectangular regions to be summarized such that information fidelity of the adapted web page is maximized, as respectively recited in combination with the other subject matter of claim 23, as amended.

Layzell fails to cure the deficiencies of Sternberg. Specifically, Layzell fails to teach or suggest any of (at least) 1) a web page definition including parametric data associated with one of the plurality of rectangular regions, the parametric data describing adaptability parameters related to the associated rectangular region; and 2) a proxy module further operable to determine a set of the plurality of rectangular regions to be summarized such that information fidelity of the adapted web page is maximized, as respectively recited in combination with the other subject matter of claim 23, as amended.

Thus, there is no way to combine selected elements of Sternberg with other elements selected from Layzell, in order to arrive at the subject matter of claim 23, as amended, as no possible combination of Sternberg and Layzell teaches or

suggests all of the required subject matter. In view of MPEP 2143.03, the § 103 rejection of claim 23, as amended, is unworkable and must be withdrawn.

Accordingly, Applicant asserts that claim 23, as amended, is allowable.

**Claim 27** is allowable at least as depending from an allowable base claim. Furthermore, Applicant notes that no § 102 or § 103 rejection has been issued against claim 27.

**Claim 28** has been amended, and as amended recites a method of generating a web page having a plurality of blocks, the method comprising:

- determining a first information fidelity associated with a first set of the plurality of blocks;
- determining a second information fidelity related to a second set of the plurality of blocks; and
- rendering the first set of blocks on a display device in a summarized version in response to determining that the first information fidelity is greater than the second information fidelity.

Claim 28 is rejected only under § 112, second paragraph, and § 101. Thus, claim 28 is not rejected under either of §§ 102 or 103 (pages 2-3 of Office action).

Applicant asserts, as indicated above, that the § 112 rejection against claim 28, as amended, has been fully addressed by way of replacing the word “fashion” with the word “version”. Again, support for this particular amendment is found at least at page 20, lines 11 to 21 of the Specification as originally filed. Applicant asserts that the § 112 rejection is thus unworkable and should be withdrawn.

Applicant also asserts that the § 101 rejection against claim 28, as amended, is unworkable and that such rejection should be withdrawn. Specifically, claim 28 (as amended) recites (among other things): rendering the first set of blocks on a

display device..., a useful, tangible and concrete final result. Thus, Applicant asserts that the subject matter of claim 28, as amended, is well within statutory bounds.

In reference to the telephonic interviews on December 18, 2006, the Examiner asserted then that claim 28 is “too broad” by virtue of, as the Applicant understands the Examiners assertion, the recitations regarding information fidelity. Applicant points out, as argued above in regard to claim 17, that there is adequate description of the term information fidelity at least at page 21, line 15 to page 22, line 14 of the Specification as originally filed.

Thus, information fidelity is clearly defined within the Application and resorting to extrinsic sources for interpretation of claim 28, as amended, is not required. As such, Applicant asserts that claim 28, as amended, is not “too broad” and is fully supported by the Specification as originally filed. Applicant respectfully refers the Office to MPEP 2111.01, which provides, in pertinent part:

“During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, \*\*>367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004)< (The USPTO uses a different standard for construing claims than that used by district courts; during examination the USPTO must give claims their broadest reasonable interpretation.). This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004)”. (MPEP 2111.01) (Emphasis added.).

Furthermore:



“It is only when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language. *In re Vogel*, 422 F.2d 438, 441, 164 USPQ 619, 622 (CCPA 1970). See also *Superguide Corp. v. DirectTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004)” (MPEP 2111.01) (Emphasis added.).

In view of the foregoing, Applicant asserts that claim 28, as amended, is allowable.

**Claims 29-34** are allowable at least as depending from an allowable base claim. Furthermore, Applicant notes that no § 102 or § 103 rejections have been issued against claims 29-34.

### **Conclusion**

All of the claims 1-3, 5-23 and 27-34, as respectively amended, are in condition for allowance. Accordingly, Applicant requests a Notice of Allowability be issued forthwith. If the Office's next anticipated action is to be anything other than issuance of a Notice of Allowability, Applicant respectfully requests a telephone call for the purpose of scheduling an interview.

Respectfully Submitted,

Dated: \_\_April 13, 2007\_\_

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